

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte BILL W. NOBLE,
VIRGINIA LAZAROWITZ, and
TIMOTHY C. MORRIS

Appeal No. 2003-0824
Application No. 09/713,974

ON BRIEF

Before WILLIAM F. SMITH, GRIMES, and GREEN, Administrative Patent Judges.

GRIMES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-9 and 11-18. Claim 10 is also pending and has been indicated to be allowable. Claims 1, 3, 16, and 17 are representative of the claims on appeal and read as follows:

1. A process for decreasing skin irritation caused by shaving comprising contacting the skin with a composition containing chitosan.
3. The process of claim 1 wherein the composition is a solid powder.

16. The process of claim 1 wherein the chitosan has a particle size of from about 0.1 to about 10 microns.
17. A safety razor blade unit having an area containing chitosan.

The examiner relies on the following references:

Nakane et al. (Nakane)	5,182,103	Jan. 26, 1993
Marchi et al. (Marchi)	5,643,672	Jul. 1, 1997
Keil et al. (Keil)	5,690,924	Nov. 25, 1997
Oldroyd	5,903,979	May 18, 1999
Sampino et al. (Sampino)	6,093,386	Jul. 25, 2000
Sine et al. (Sine)	6,183,766 B1	Feb. 6, 2001

Claims 1, 8, 9, 11, 13, and 14 stand rejected under 35 U.S.C. § 103 as obvious in view of Sampino and Sine.

Claims 2, 15, and 16 stand rejected under 35 U.S.C. § 103 as obvious in view of Sampino, Sine, Keil, and Nakane.

Claims 3-7 stand rejected under 35 U.S.C. § 103 as obvious in view of Sampino, Sine, Keil, Nakane, and Marchi.

Claims 12, 17, and 18 stand rejected under 35 U.S.C. § 103 as obvious in view of Sampino, Sine, Keil, Nakane, and Oldroyd.

We reverse.

Background

Chitin is a polymeric compound derived from natural products such as crustacean shells. See the specification, page 3. Chitosan is derived from chitin by deacetylation. Id. The specification discloses that applying a chitosan-containing formulation to the skin reduces skin irritation caused by shaving. Page 1. The chitosan can be applied either before or after shaving. See page 4.

Discussion

Claim 1, the broadest claim on appeal, is directed to a method for decreasing skin irritation caused by shaving, by contacting the skin with a chitosan-containing composition. The examiner rejected claim 1, together with other claims, as obvious in view of Sampino and Sine, as follows:

Sampino et al. describe shaving preparation composition in water comprising 0.01 – 2% by weight of chitosonium pyrrolidone carboxylate [sic] in water. . . . The reference teaches that the compositions softens [sic] hair and conditions the skin, and reduces irritation associated with the growth of new hair. . . . The reference lacks the mention of employing chitosan in the composition.

Sine et al. teach skin care composition for sanitizing and moisturizing the skin. The reference teaches that soluble chitosan reduces skin irritation. . . .

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition in Sampino et al. by adding soluble chitosan as taught by Sine et al. because of the expectation to have produced a[n] irritation-reducing shaving composition.

Paper No. 5, mailed October 10, 2001, page 2.

“In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. ‘[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.’” In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citations omitted, bracketed material in original).

An adequate showing of motivation to combine requires “evidence that ‘a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.’” Ecolochem, Inc. v. Southern Calif. Edison Co., 227 F.3d 1361, 1375, 56 USPQ2d 1065, 1075 (Fed. Cir. 2000).

In this case, we cannot agree with the examiner that the cited references would have suggested the method now claimed. As the examiner noted, Sampino discloses a shaving lotion comprising a chitosan derivative. The derivative is obtained from shrimp shells by treating the chitin in the shells with chitinase, then isolating and purifying the resulting “chitosonium pyrrolidone carboxylate.” See column 1, line 65 to column 2, line 9.

As the examiner noted, Sine teaches that soluble chitosan is one of several known irritation reducing agents that can be used in, e.g., a hand sanitizing composition. See column 14, lines 55-62; column 2, lines 24-28. The examiner argued that this teaching would have led those skilled in the art to add soluble chitosan to the shaving lotion disclosed by Sampino. We disagree.

Sampino teaches that use of the disclosed lotion “mak[es] shaving effortless, painless, and irritation free.” Abstract (emphasis added). The examiner has not adequately explained why those skilled in the art would have been led to add other, known irritation-reducing agents to the disclosed lotion – if the lotion already makes shaving “irritation-free”, why would the skilled artisan add another irritation-reducing agent?

In addition, while Sampino teaches that the disclosed lotion can comprise other “non-essential ingredients”, those ingredients do not include irritation reducing agents. See column 2, lines 50-52 (“preservatives . . . , fragrances, emulsifiers, colors, and surfactants (shampoo).”). Thus, Sampino does not suggest adding an irritation-reducing agent to the disclosed composition.

And, even if a skilled artisan would have been motivated to add an irritation-reducing agent to Sampino’s shaving lotion, the examiner has not adequately shown that it would have been obvious to choose one of those disclosed by Sine. Sine lists chitosan among a number of known irritation-reducing agents. That, in itself, is not fatal to the examiner’s case. See Merck & Co. Inc. v. Biocraft Laboratories Inc., 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989) (“Disclos[ure of] a multitude of effective combinations does not render any particular formulation less obvious.”).

However, Sine’s composition is a skin-sanitizer intended to prevent passage of germs between individuals. See column 1, lines 13-40. Sine does not address the use of irritation-reducing agents in shaving lotions. Neither Sine nor Sampino compare skin irritation caused by shaving to other types of skin irritation, including the types of irritation intended to be treated or avoided by the agents in Sine’s composition. The examiner has cited no other evidence to show that those skilled in the art would have considered the irritation-reducing agents listed by Sine to be suitable for combination with “chitosonium pyrrolidone carbonxylate” in shaving lotions.

In addition, the examiner has provided no evidence or reasoning to show that those of skill in the art would have been motivated to select chitosan, specifically, from among the irritation-reducing agents set out in Sine. The examiner has not shown, for example, that chitosan was known to be an especially good irritation reducer or that its properties would have been expected to complement Sampino's "chitosonium pyrrolidone carbonxylate". In fact, we note that Sampino's "chitosonium pyrrolidone carbonxylate" appears to be a salt or derivative of chitosan; thus, if anything, it would appear that those skilled in the art would expect chitosan and "chitosonium pyrrolidone carbonxylate" to have similar properties. Thus, it would not appear that those skilled in the art would have expected any unusually beneficial effect to result from the combination.¹

"[E]vidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved. . . . The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular." In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The examiner has not provided adequate evidence to show that persons skilled in the art would have been led to combine the teachings of Sampino and Sine.

¹ We are not saying that a conclusion of obviousness requires that those skilled in the art would have expected the combination to be unusually beneficial, only that such an expectation, if shown by the evidence, could provide a basis for combining the references. See Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984) ("[T]he question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.")].

The examiner has argued that those skilled in the art would have been led to combine Sampino and Sine, because “[i]t is generally considered prima facie obvious to combine two compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose.” Examiner’s Answer, page 4, citing In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

This is not a case in which the Kerkhoven rationale can be relied on to fill an evidentiary deficit. In Kerkhoven, the claims required “no more than the mixing together of two conventional spray-dried detergents.” 626 F.2d at 850, 205 USPQ at 1072. Here, by contrast, Sampino teaches one compound as useful in a shaving lotion, while Sine teaches another compound as an irritation-reducing agent in a skin sanitizer. The references do not teach that components of shaving lotions and skin sanitizers are interchangeable. The references thus do not teach “two compounds . . . useful for the same purpose,” and Kerkhoven is not on point.

Since the examiner has not shown that those skilled in the art would have been led to combine the teachings of Sampino and Sine, the rejection of claims 1, 8, 9, 11, 13, and 14 under 35 U.S.C. § 103 is reversed. The examiner also rejected claims 2-7, 12, and 15-18 as obvious in view of various references. Each of these rejections, however, depends on the combination of Sampino and Sine. We have reviewed the other references cited by the examiner; none of them make up for the deficiency of Sampino and Sine. Therefore, the other rejections on appeal are reversed for the same reasons discussed above.

Summary

The references cited by the examiner do not support a prima facie case of obviousness. The rejections under 35 U.S.C. § 103 are reversed.

REVERSED

WILLIAM F. SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERIC GRIMES)	
Administrative Patent Judge)	APPEALS AND
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